

Notice of Allowability

Application No.

10/665,465

Applicant(s)

HATA, DAISUKE

Examiner

Usman Khan

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/09/2007.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on 03/23/2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,700,614 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded. The rejection of double patenting cited in the office action dated 12/14/2006 has been withdrawn due to the filing of the terminal disclaimer.

Response to Amendment

Regarding objection to specification for failing to provide a descriptive title. Applicant has amended the title of the invention to overcome the objection to the specification.

Regarding rejection under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement has been withdrawn since the applicant has support for that the light from the flash is able to vary in the specification and in the.

The rejection of double patenting cited in the office action dated has been withdrawn due to the filing of the terminal disclaimer.

Allowable Subject Matter

Claims 1-12 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding independent **claim 1**, the prior art of record fails to teach or fairly suggest "An autofocus apparatus comprising: an image pickup means for converting the light of an object received through a focus lens system to electric signals and outputting the signals as image data; an A/D converting means for A/D-converting the image data to obtain digital image data; an AF evaluating means for outputting an AF evaluated value obtained by integrating high-frequency components of brightness data in the digital image data; a sampling means for sampling the AF evaluated value obtained by said AF evaluating means while moving the position of said focus lens system; a flash means for illuminating light; and a focus driving means for determining a focus according to a result of the sampling of an AF evaluated value by said sampling means and driving said focus lens system to the focus position; wherein light is flashed in synchronism with the sampling timing of an AF evaluated value".

Regarding independent **claim 7**, the prior art of record fails to teach or fairly suggest "An autofocus apparatus comprising: an image pickup device which converts the light of an object received through a focus lens system to electric signals and outputting the signals as image data; an A/D converter which A/D-converts the image data to obtain digital image data; an AF evaluating unit which outputs an AF evaluated value obtained by integrating high-frequency components of brightness data in the digital image data; a sampling unit which samples the AF evaluated value obtained by said AF evaluating unit while moving the position of said focus lens system; a flash

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which illuminates light; and a focus driver which determines a focus according to a result of the sampling of an AF evaluated value by said sampling unit and driving said focus lens system to the focus position; wherein light is flashed in synchronism with the sampling timing of an AF evaluated value".

Regarding **claims 2 - 6**, these claims are allowed as being dependent from allowed independent claim 1.

Regarding **claims 8 - 12**, these claims are allowed as being dependent from allowed independent claim 7.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Usman Khan
4/10/2007
Patent Examiner
Art Unit 2622



DAVID OMETZ
SUPERVISORY PATENT EXAMINER